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09/718,595	11/21/2000	Dan Kikinis	P1541D1	5336

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EXAMINER	
PRIETO, BEATRIZ	
ART UNIT	PAPER NUMBER
2142	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/718,595	KIKINIS, DAN	
	Examiner	Art Unit	
	Prieto B.	2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 November 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *16-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *16-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 November 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. Quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action may be found in previous office action.

2. Claims 16-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Broadwin, et. al. (Broadwin) U.S. Patent No. 5,929,850 in view of Eyer U.S. Patent No. 5,982,445 in further view of Williams, Jr. U.S. Patent No. 4,868,866 (Williams hereafter).

Regarding claim 16, Broadwin teach a system for providing information, including a ~~set top box~~ system, comprising;

a broadband receiver (140) to receive a displayable SINGLE data stream (col 6/lines 50-60);

displayable indicia are pre-associated with commands (col 6/lines 18-23, 32-44) at a head end (100) (col 5/lines 21-36, selection options/thumbnails, col 9/lines 27-63, link data, col 6/lines 40-44) and provided as a part of the future programming information in a displayable single data stream (col 6/lines 18-23, 32-44);

circuitry to select the information, including the displayable indicia, and to cause it to be displayed (col 5/lines 64-col 6/lines 8);

a memory (col 7/lines 13-34) for storing (col 2/lines 64-66) information including displayable indicia (col 6/lines 53-60) continuously received (col 9/lines 1-8, col 6/lines 28-31), wherein said memory is repeatedly updated by said information including displayable data stream (steps 446 and 448 of Fig. 8);

user-operable apparatus (152) to select the displayable indicia (col 7/lines 52-63, col 9/lines 15-26);

wherein, in response to selecting the displayable indicia, a ~~the~~ command associated with the selected displayable indicia is executed (col 11/lines 6-26, col 7/lines 58-63, col 8/line 5-12,

col 10/line 4-17, 58-63); however prior does not teach where the information is particularly future programming information;

Eyer teaches display data (displayable indicia) are pre-associated with commands at a service provider 100 (col 7/lines 59-col 8/line 19) and provided to head end (160) as a transport stream for distribution to the "set-top box" system (col 8/lines 20-38), display data is provided as a part of the program guide with program scheduling information (programming information) in a displayable data stream, (col 4/lines 20-col 5/line 10);

a memory (col 8/lines 39-64 and col 9/lines 14-30) to store programming information (col 8/lines 39-64), wherein said memory is repeatedly updated by said displayable data stream (updated repeatedly see col 11/lines 1-12, or updated upon demand col 9/lines 5-13 col 10/lines 6-11, 21-26 or updated in real-time see col 10/lines 49-59); although the prior art teaches providing from a remote database receiving information from a plurality of sources, pages of data for a user; however it does not explicitly teach a remote database receiving information from a variety of sources, the database is periodically searched "scanned" for identified data.

Williams teaches a scanning periodically a database (col 8/lines 58-col 9/line 2, 32-41 and col 23/lines 67-col 24/line 40) for identified data (col 7/lines 50-65) for the user (col 11/lines 50-64).

It would have been obvious to one ordinary skilled in the art at the time the invention was made to utilize Eyer's teaching where displayable indicia are pre-associated with commands at a service provider system and provided as part of the future programming information in a displayable data stream to the set-top box, as taught by Eyer, motivation would include with the audiovisual content other audiovisual programming that is normally seen on television utilizing the commands associated with the audiovisual content to commands for controlling television and non-television appliance functions along with commands for purchasing over the Internet, as taught by Eyer. It further would have been obvious at the time the invention was made given the suggestions of Broadwin for providing periodically from a remote database information in the form of a page to the user, suggesting providing information news and stock related information, to utilize Williams teaching for providing a user periodically database information such as stock and news information, motivation would be to complement Broadwin system utilizing Williams suggestion of implementing his teachings for other type of information that can be formatted into

a machine readable format compatible with whatever system design choice may be, including may be converted for broadcast in any readily format, and wherein user's receiving device may be a personal computer, readily implementable in Broadwin's system.

Regarding claim 17, wherein execution of the command comprises switching the display to a channel associated with the future programming (Eyer: switching channels, abstract, program guide schedule information col 4/lines 47-50, selection of particular programming service channel, col 4/lines 66-col 5/line 10).

Regarding claim 18, wherein a portion of the information received comprises WEB pages in a Markup Language (Eyer: abstract, col 5/lines 13-26).

Regarding claim 19, wherein the broadband receiver comprises a satellite data link adapted to download a satellite broadcasted data stream, and the information is received via the satellite data link (Eyer: Fig. 1, col 8/line 13-17, 30-32, 39-44).

Regarding claim 20, wherein a portion of the information received by satellite data link comprises Markup Language (110) (Eyer: Fig. 1, col 8/lines 39-52).

Regarding claim 21, wherein the future programming information is received along with television programming (Eyer: col 4/lines 20-col 5/line 10).

Regarding claim 22, a memory system (cache) wherein the future programming information including the command and displayable indicia associated with the command is stored (Broadwin: col 8/lines 53-56).

Regarding claim 23, wherein the broadband receiver (Eyer: col 5/lines 13-26) further comprises a satellite data link adapted to download a satellite broadcast data stream (Eyer: col 8/lines 20-38), and a land-based modem (324) (Broadwin: col 7/lines 64-col 8/line 3), and the future

programming information is received by one or both of the satellite data link and the land based modem (Eyer: Fig. 1, col 8/lines 39-52, Eyer: col 4/lines 20-col 5/line 10).

Regarding claim 24, a user-operable WEB browser for browsing for Web-based information. (Eyer: col 9/lines 16-18).

Regarding claim 25, this claim comprises the method including features comprised in a set-top box system discussed in claim 16, same rationale of rejection is applicable for the method claims.

Regarding claims 26-33 these claims are substantially the same as claims 17-24, respectively, same rationale of rejection is applicable.

Regarding claim 34, (CANCELED)

3. Claims 16 and 25 are also be rejected under 35 U.S.C. 103(a) as being unpatentable over Harper et. al. (Harper) U.S. Patent No. 5,585,858 in view of Coleman et. al. (Coleman) U.S. Patent No. 5,844,620 and further exemplified Williams, Jr. U.S. Patent No. 4,868,866 (Williams hereafter) (see previous rejection)

Regarding claim 16, Harper teaches a system (600 of Fig. 3), (col 6/lines 40-41, col 3/lines 66-col 4/line 5), comprising;

receiver coupled to a broadband bandwidth channel for receiving digital/analog data, e.g. conventional television broadcast signals (i.e. a broadband receiver) (col 3/lines 44-col 4/line 5, col 6/lines 28-41);

receiving by said receiver displayable single data stream (col 3/line 43-46, 52-65),

displayable data stream e.g. video and graphics signal from a head end, (col 6/lines 16-25, 31-35, col 9/lines 6-21) including command(s) associated with a displayable indicia (col 8/lines 19-26, col 7/lines 19-22, commands, col 19/lines 15-21, commands associated with displayable indicia, col 8/lines 1-14, 19-26, 34-42, col 9/lines 14-19);

circuitry (616 of Figs. 3 and 7, col 5/lines 6-11) for selecting in the displayable indicia stream (col 12/lines 17-34, displayable data stream col 5/lines 67-col 6/line 9) and to form displayable data stream (col 12/lines 17-34, col 18/lines 39-42), the display including the displayable indicia (col 17/lines 51-59);

user-operable apparatus (604 of Fig. 1, col 6/lines 41-42) to select the displayable indicia (col 6/lines 49-col 7/line 6);

in response to selecting the displayable indicia, the command associated with the selected indicia is executed (col 18/line 59-col 19/line 6), in response to a selection of displayable indicia associated with a command is execution (col 7/line 65-col 8/lines 1-14); however Harper does not explicitly teach where displayable data stream including a displayable data stream which further includes future programming is received;

Coleman teaches receiving in real time video data including displayable data stream including future programming information (e.g. video and graphic blended in received stream, col 2/line 45-55),

data stream including "demand data stream" further including future programming information (i.e. schedule guide) is received, (col 4/lines 60-col 5/line 3), received (32), demultiplexed (34) and displayed (54) (col 13/lines 37-48, 62-col 14/line 4, 19-22, rendered i.e. cause it to be displayed, col 7/lines 2-14) program guide is acquired and displayed caused it to be displayed in real time, (col 6/lines 39-59 and col 7/lines 2-14 retrieved and displayed immediately);

displayable data stream information including displayable indicia associated with commands (col 3/lines 36-42, col 15/lines 32-42);

a memory to store said programming information, where said memory is repeatedly updated by said displayable data stream (storing e.g. in a RAM programming information repeatedly updated see col 1/lines 28-32, 56-col 2/line 11, repeatedly updated in real time col 4/lines 48-col 5/line 3); although the prior art teaches providing from a remote database receiving information from a plurality of sources, pages of data for a user; however it does not explicitly teach a remote database receiving information from a variety of sources, the database is periodically searched "scanned" for identified data.

Williams teaches a scanning periodically a database (col 8/lines 58-col 9/line 2, 32-41 and col 23/lines 67-col 24/line 40) for identified data (col 7/lines 50-65) for the user (col 11/lines 50-64).

It would have been obvious to one ordinary skilled in the art at the time the invention was made to include displayable data stream received in real time including displayable data stream further including future programming, motivation would be to further enhance Harper's composite interactive programming including future graphics message selection and associated commands broadcast as data codes embedded in the conventional video signal may be created to be include in other broadcast programs, as suggested by Harper. It further would have been obvious at the time the invention was made to utilize Williams teaching for providing a user periodically database information such as stock and news information, motivation would be to utilizing Williams suggestion of implementing his teachings for other type of information that can be formatted into a machine readable format compatible with whatever system design choice may be, including may be converted for broadcast in any readily format.

Regarding claim 25, comprises the method for commanding the set-top box apparatus claimed on claims 16 and/or 34 rejected for obviousness under U.S.C. 103, this same rationale is also applied to method claims.

Response to Arguments

4. Regarding claims 16 and 25 rejected as being obvious over Broadwin in view of Eyer and Williams it is argued (p. 5-8 of remarks) that the applied reference does not teaches a database that is located remote from a user receives programming information from a variety of sources and the database provides active pages of data for a user, wherein the database is repeatedly scanned in order to identify data for the data stream because it is not pointed out nor applicant find the teachings in the Broadwin and Williams reference.

In response to the above argument, it is noted that according to applicant's specification database stored web content which is scanned in a repetitive operation such as continuously or in

other be periodic and repetitively depending on specific system requirement is know in the prior art (page 6, lines 24 to page 7, line 8). Admitted prior art (see MPEP 2129).

Repeatedly updating programming information including displayable indicia in a displayable data stream is taught by the prior art of record as noted above and further below.

Williams discloses on the portions cited, a period "recap" function upon which determining a predetermined period of time has elapsed the entire database is scanned (see column 8, line 58 to column 9, line 2); including reporting all updated values identified during the periodic functions (column 9, lines 32-41). Williams further teaches where the period functions comprise: update data detection means for scanning the real-time data stored in the central database means in order to detect real-time data which is updated from that which was in the central database means at the immediately preceding scan of said detection means; and recap message generation management means responsive to said message queue processing management means for controlling the generation of recap messages either in groups at predetermined intervals of time or continuously (column 23, line 67-column 24, line 9) for broadcasting (column 11, lines 50-64).

Williams teaches a scanning periodically a database for identified data for providing to the user.

5. Regarding claims 16 and 25 rejected as being obvious over Broadwin in view of Eyer and Williams it is argued (p. 5-8 of remarks) that there is not motivation to combine an interactive system with a non-interactive system because they are "incompatible".

In response to the above-mentioned argument, Applicant's characterization of prior art references as being "incompatible" because one is "interactive" and another "non-interactive" is noted. However, Eyer discloses that view of the rapidly increasing use of Web pages and other resources which are created using HTML, it would be advantageous to provide a scheme for adapting such resources for use by consumers and others via television or other broadcast or pre-recorded media. In particular, it would be desirable to provide graphical and textual displays for use with a television for educational and entertainment purposes. Such displays should be compatible to the extent possible with existing transmission and receiving equipment including set-top decoders and the like, and should further be compatible with current communication

protocols such as those for transmission of digital television signals via satellite and/or cable plants. (column 3, lines 63-column 4, line 8). The HTVP concept, which is a framework upon which future protocols can be developed and defined, builds upon the methods used by HTML pages for URL syntax and virtually any type of content or format (column 6, lines 18-25); the levels of HTML discussed by Eyer are fully backward compatible (column 2, lines 27-32). Techniques for providing multiple images in a television display (e.g., picture-in-picture) are well known in the art. Any such well-known technique may be used to provide the combined display of FIG. 4. (column 10, lines 27-35). A non-television function or appliance is defined herein to refer to any device, apparatus or system other than a television, and includes, for example, a heating or air conditioning system, a security system, an air filtering system, or household appliances such as a water heater, clothes washing machine, or dishwasher. The term further encompasses analogous electronic equipment for recording or otherwise processing the video portion of a programming service signal outside of the television (column 12, lines 65-column 13, line 13).

Moreover, according to Eyer, his invention is compatible with virtually any type of programming service, including television, information services such as stock prices and weather data, and audio/video programming implemented in software including games and other programming. (column 13, lines 56-61).

Williams discloses that it will be apparent to those skilled in the art that similarly unique message body formats can be constructed for any particular application of a broadcast data distribution system. (column 16, lines 23-26).

Thus, applicant's concern with respect to the "compatibility" between the applied references, namely, of the primary reference with the secondary and/or third reference have been fully considered but found inconsistent with the teachings of the reference(s).

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH

shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prieto, B. whose telephone number is (571) 272-3902. The Examiner can normally be reached on Monday-Thursday from 5:30 to 2:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Andrew T. Caldwell can be reached at (571) 272-3868. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800/4700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system, status information for published application may be obtained from either Private or Public PAIR, for unpublished application Private PAIR only (see http://pair-direct.uspto.gov or the Electronic Business Center at 866-217-9197 (toll-free).

Any response to this action should be mailed to:
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Beatriz Prieto
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